

Name: _____

1. Write your group's name in the space provided above.
2. List the members of your group below:

3. Represent all nonisomorphic n -ary relations R_n whose attributes have the common domain $[m] = \{1, 2, 3, \dots, m\}$ for $n = 0, 1, 2, 3, \dots$ and $m = 0, 1, 2, 3, \dots$ (as high as you can manage for both n and m).

4. Provide an algorithm to systematically generate all the relations from Question 3. Explain why your algorithm is correct.
5. Quantify the running time of your algorithm analytically.
6. (homework) Implement your algorithm and analyze its performance experimentally.